



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,655

03/07/2007

Tore Omtveit

DEH-0020

8180

23413 7590 01/11/2011
CANTOR COLBURN LLP
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER

BLOCH, MICHAEL RYAN

ART UNIT

PAPER NUMBER

4137

NOTIFICATION DATE

DELIVERY MODE

01/11/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

Office Action Summary	Application No. 10/576,655	Applicant(s) OMTVEIT, TORE	
	Examiner MICHAEL R. BLOCH	Art Unit 4137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 4137

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-6, drawn to a sensor for insertion inside the body to measure one of the following parameters: partial CO₂ pressure, partial oxygen pressure, temperature, pH, glucose concentration; an electrical cable for connection to the sensor; a sheath; where in the sheath comprises a plurality of longitudinally extending flexible portions to maintain the sensor inside the body.

Group II, claim(s) 7-9, drawn to a sensor for sensing partial CO₂ pressure having two electrodes; an electrical cable connected to the electrodes; a sheath wherein the sheath forms the carbon dioxide permeable membrane.

Group III, claim(s) 10, drawn to a sensor for insertion into the tissue to measure one of the following parameters: partial CO₂ pressure, temperature, pH, glucose concentration; a signal processing device; a reference electrode; wherein the reference electrode is configured to compensate the electrical signals from the electrical sensor for electromagnetic noise from the patient by reference to signals from the reference electrode.

Group IV, claim(s) 11-16, drawn to a sensor with a longitudinal axis with at least two electrodes spaced in a direction transverse to the longitudinal axis of the sensor body; support members extending outwardly from the axis of the sensor and the body; a gas permeable membrane.

Group V, claim(s) 17, drawn to a sensor body having a water-filled chamber closed by a semi-permeable membrane, the method comprising: immersing the sensor in water; and attaching the membrane to the sensor body to close the chamber while the sensor body is in the water.

2. The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons. Groups I-V lack a unity of invention because the

Art Unit: 4137

groups do not share the same or corresponding technical feature. Group I consists of the sensor discussed above with an electrical sensor, electrical cable, and a sheath with extending flexible portions. Group II consists of the sensor discussed above comprising two electrodes in water bounded with a carbon dioxide permeable membrane, an electrical cable, and a sheath permeable to carbon dioxide. Group III consists of the sensor discussed above with a sensor body, signal processor and reference electrode. Group IV consists of the sensor discussed above consisting of a longitudinal body with multiple electrodes, support members, fluid channels, and a gas permeable membrane. Group V consists of the method of manufacturing a sensor as discussed above. The electrical sensor body with electrodes, membrane, and cable wires in Groups I-V cannot be considered a special technical feature under PCT Rule 13.1 as Wilson et al. US 5,165,407 teaches a device with an implantable sensor body containing two electrodes, a membrane around the sensor, and electrical wires.

What novel features may exist in Group I is the sensor with a sheath of extendable portions. What novel feature may exist in Group II is the sensor with two electrodes spaced in a water chamber bound by a carbon dioxide permeable membrane with a carbon dioxide permeable sheath on the cable connected to the electrodes. What novel features may exist in Group III is the signal processor device connected to the sensor and the external reference electrode. What novel features may exist in Group IV is the sensor body with electrodes spaced on the sensor, support members, and fluid channels. What novel features may exist in Group V is the manufacturing of a sensor by immersing the sensor body in water and attaching the membrane to the sensor body while the sensor is in the water.

Art Unit: 4137

No mention of an extendable sheath is present in Groups II-V; no mention of two spaced electrodes in water with a permeable membrane on the sensor and sheath exists in Groups I or III-V; no mention of a signal processor connected to a sensor and external reference electrode exists in Groups I, II, IV, or V; no mention of multiple electrodes spaced on a sensor with fluid channels, support members and a permeable membrane exists in Groups I-III or V; no mention of a manufacturing of a sensor with a water filled chamber with permeable membrane exists in Groups I-IV.

As such, Groups I-V do not relate to a single general inventive concept. Restriction between the five groups is therefore necessary.

3. The election of an invention may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof. Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. Where such evidence or admission is provided by applicant, if the examiner finds one of the inventions unpatentable over the prior art,

Art Unit: 4137

the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. A telephone call was made to Daniel Drexler on December 14, 2010 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof. Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. Where such evidence or admission is provided by applicant, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. BLOCH whose telephone number is (571)270-3252. The examiner can normally be reached on 7:30-5:00 Monday-Thursday; Alternate Fridays 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisors, Gary Jackson can be reached on (571)272-4697, or Frantz Jules can be reached on (571)-270-3253. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744

/M. R. B./
Examiner, Art Unit 4137